

**Organizer:** Ohl, Matthew : ohl.matthew@epa.gov  
**Subject:** Third Site DNAPL Area Call 312-667-5632, code 561227694#  
**Location:**  
**Start Time:** 2021-02-16T19:30:00Z  
**End Time:** 2021-02-16T20:30:00Z  
**Attendees:** nwbernstein@nwblc.com : nwbernstein@nwblc.com

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From: Norman Bernstein <nwbernstein@nwblc.com<mailto:nwbernstein@nwblc.com>>  
Sent: Monday, February 8, 2021 1:55 PM  
To: Krueger, Thomas <krueger.thomas@epa.gov<mailto:krueger.thomas@epa.gov>>  
Cc: pracher@psrb.com<mailto:pracher@psrb.com>; Doug Petroff  
<DPetroff@idem.in.gov<mailto:DPetroff@idem.in.gov>>; Ohl, Matthew  
<ohl.matthew@epa.gov<mailto:ohl.matthew@epa.gov>>  
Subject: Re: Third Site DNAPL Area

That works for both Peter and me.

Norm

On Mon, Feb 8, 2021 at 9:08 AM Krueger, Thomas  
<krueger.thomas@epa.gov<mailto:krueger.thomas@epa.gov>> wrote:  
Would Tuesday, Feb. 16 at 2:30 Eastern/1:30 Central work?

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From: Norman Bernstein <nwbernstein@nwblc.com<mailto:nwbernstein@nwblc.com>>  
Sent: Thursday, February 04, 2021 12:02 PM  
To: Krueger, Thomas <krueger.thomas@epa.gov<mailto:krueger.thomas@epa.gov>>  
Cc: pracher@psrb.com<mailto:pracher@psrb.com>; Doug Petroff  
<DPetroff@idem.in.gov<mailto:DPetroff@idem.in.gov>>; Ohl, Matthew  
<ohl.matthew@epa.gov<mailto:ohl.matthew@epa.gov>>  
Subject: Re: Third Site DNAPL Area

Mr. Krueger

Thank you for your email. Peter and I would be available to talk on Feb. 15, 16 or 17. Would any of those dates work for you all?

Just a heads up. Some time in the next few days the technical people will be reaching out to Matt re ECC. They want to talk with him and the Corps. about the long set of comments received regarding the ECC RAA. Peter and I will probably participate and you may want to too.

All the best and stay safe.

Norm Bernstein

On Wed, Feb 3, 2021 at 6:19 PM Krueger, Thomas  
<krueger.thomas@epa.gov<mailto:krueger.thomas@epa.gov>> wrote:  
Dear Mr. Bernstein and Mr. Racher,

Thank you for your letters dated January 15 and January 19, 2021, requesting informal dispute resolution prior to possible initiation of formal dispute resolution under the Third Site AOC. EPA is happy to schedule a call at the Trustees\* convenience to discuss the issues you have raised concerning EPA\*s

comment on the Supplemental Sampling Report. To help focus that discussion, EPA is providing further clarification and context.

The cleanup objective in the Action Memorandum and Amended Action Memorandum is to alleviate threats and potential threats to human health and the environment. The Amended Action Memorandum (p.3) summarized the actions required for the DNAPL area under the original 2001 Action Memorandum and the 2002 AOC:

- 1) Treating and containing the DNAPL area by using a sealed sheet pile wall and then pumping out the interior to remove the bulk of the mobile DNAPL. Pumping included the dewatering of the portion of Bankert Pond within the containment area, and treatment of the water removed from the DNAPL area to meet Indiana discharge requirements.
- 2) Following the localized pumping and treating of water within the containment wall, injecting chemical oxidation agents into the DNAPL area to break down any remaining DNAPL and to meet the cleanup standard of at least 90% reduction in total VOC groundwater concentration within the containment wall from pre-response levels.
- 3) After meeting cleanup standards, installing a RCRA compliant cover to prevent further infiltration of rainwater and installing a gate containing a reactive media to provide treatment for any residual contamination that may later escape the containment area.

The stated objective of the selected response actions at the Site was to alleviate the potential and actual threats posed by contamination in the DNAPL area that exceeds MCLs and soil-to-groundwater standards.

2016 Amended Action Memorandum at p. 3 (emphasis added).

The Amended Action Memorandum adopted the supplemental removal action \* Electrical Resistance Heating (ERH) -- proposed by the Trustees to achieve cleanup standards that the chemical oxidation treatment failed to meet. In doing so, the Amended Action Memorandum clearly stated the treatment requirements of the Action Memorandum and Amended Action Memorandum, as incorporated in the AOC (as amended):

The minimum DNAPL area cleanup requirements remain the breakdown of any DNAPL and a 90% reduction in VOCs in groundwater\*. Multiple rounds of post-treatment sampling will be necessary to evaluate whether VOC concentrations in groundwater rebound. This will help assess whether ERH treatment achieves long-term compliance with cleanup standards. If ERH fails to achieve and maintain those requirements, additional measures will be required.

2016 Amended Action Memorandum at p.5 (emphasis added)

As Geosyntec's Supplemental Sampling Report states, based on the established baseline, the 90% cleanup standard for VOCs in groundwater is 4,285 micrograms per liter. The chemical oxidation treatment's effectiveness was originally to be guided by evaluating the extent of reductions achieved at MW-19A and MW-19B. Because those monitoring wells were removed, samples were instead collected from the sump, and piezometers P-1, P-2, and P-3.

The Supplemental Sampling Report compiles data gathered after completion of the ERH treatment that confirms the ERH applications did not achieve cleanup standards at the designated locations and elsewhere. The Trustees' letter (p.6) acknowledges the failure to meet the treatment standard and the need for further action to break down residual DNAPL.

When the ERH treatment failed to reach cleanup standards at P-1 and P-2, the Trustees pursued Phase I and Phase II supplemental sampling in 2020 to determine the cause of that failure. The supplemental sampling evaluated residual contaminant mass in the DNAPL area based on a multiple lines of evidence

approach.

Page 3 of Geosyntec's Supplemental Sampling Report summarizes the purposes of the project:

- \* Develop a current understanding of contaminant distribution within the DNAPL containment area following ERH, specifically:

- \* The current spatial distribution of contaminants in the DNAPL containment area; and
  - \* Potential mass in the upper portion of the Lower Till underlying the DNAPL containment area.

- \* Identify the source of the groundwater contamination detected in wells P-1 and P-2 following ERH; specifically, to confirm whether there is residual untreated mass within the ERH target treatment area or whether mass is entering the ERH treatment volume from the underlying Lower Till.

EPA does not object to the Report stating (as it does on page 1), that the supplemental sampling effort was not specifically intended to be used for ERH compliance monitoring. EPA's comment that gives rise to this dispute simply asked the Trustees to remove a note that was included in three of the Report's figures. The language of that note -- quoted below -- is unnecessary, and needlessly self-serving and overreaching. It adds nothing of value to the figures:

\*For EPA's convenience only, and not as a compliance matter, values in excess of those values at other locations are *Italicized*.\*

The data that the Trustees gathered from other locations to evaluate ERH's effects is more than just *\*convenient\** \* it is intended to be useful and informative. Attempting to minimize or constrain the value of relevant data is confusing, if not disingenuous. Further distinguishing results by use of italic instead of bold fonts based on which sampling locations produced them seems unnecessary, because all of those results are relevant to the stated purpose of the investigation.

The Trustees then seem to transpose EPA's request to keep the information in the figure simple and straightforward into a demand for multiple new compliance points. EPA was simply emphasizing that multiple data points can help the parties assure the accuracy and sustainability of previous measurements and thus the validity of any conclusion that the objective of 90% reduction of total VOCs throughout the DNAPL area has been reached and will be maintained.

The objective of the sampling at the sump and piezometers is to guide treatment for the enclosed DNAPL area. To the extent other valid data become available for other areas of the DNAPL area it would be unreasonable to ignore it, especially when the data were specifically developed to ev